

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	I	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,029	09/890,029 07/24/2001		Gabor Bogyc	21965	6045
535	7590 04/27/2006 EXAMINER				INER
		RL F ROSS	HUI, SAN MING R		
5676 RIVEF PO BOX 90		VENUE	ART UNIT	PAPER NUMBER	
RIVERDAL	E (BRO)	NX), NY 10471	1617		

DATE MAILED: 04/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
		09/890,029	BOGYE, GABOR				
	Office Action Summary	Examiner	Art Unit				
		San-ming Hui	1617				
<u> </u>	The MAILING DATE of this communication app	-					
Period fo	or Reply		·				
WHIC - Exte after - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE of the may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It is period for reply is specified above, the maximum statutory period we re to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed on <u>09 Fe</u>	ebruary 2006.					
2a)⊠	This action is FINAL. 2b) ☐ This action is non-final.						
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.				
Dispositi	on of Claims						
4)⊠	Claim(s) 9-12,20 and 25-39 is/are pending in the	ne application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)[Claim(s) is/are allowed.						
· —	Claim(s) <u>9-12,20 and 25-39</u> is/are rejected.						
· · · · · · · · · · · · · · · · · · ·	Claim(s) is/are objected to.						
8)[_]	Claim(s) are subject to restriction and/or	r election requirement.					
Applicati	on Papers		•				
9)[The specification is objected to by the Examine	r.					
10)	The drawing(s) filed on is/are: a) \square acce	epted or b) objected to by the E	Examiner.				
	Applicant may not request that any objection to the o	• • • • • • • • • • • • • • • • • • • •	` '				
44)	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)[_]	The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority L	ınder 35 U.S.C. § 119						
12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)☐ All b)☐ Some * c)☐ None of:							
	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No						
	3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
oce the attached detailed Office action for a list of the certified copies not received.							
A4	val.						
Attachment 1) Notice	t(s) e of References Cited (PTO-892)	4) 🗍 (=+===================================	(DTO 442)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date							
	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	5)	atent Application (PTO-152)				

Application/Control Number: 09/890,029

Art Unit: 1617

DETAILED ACTION

Applicant's amendments filed February 9, 2006 have been entered. Claims 26-39 have been added. Claims 13-19 and 21-24 have been cancelled.

The declaration filed February 9, 2006 have been considered, and is found persuasive to withdraw the rejection under 35 USC 102(e) over Kafrissen et al.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 20, 26-28, 32, 33, 34,35, and 39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "an otherwise healthy patient" recited in claim 20 renders the claims indefinite as to the patient population encompassed thereby. It is not clear what patients or individually would be considered "healthy" as recited in the claims. Is patients experiencing side effect from the medication considered "healthy"? For example, if a patient takes progesterone composition and experience headache or depression after taking the medication, is she a "healthy" patient? The metes and bounds of the claims are not clear. Furthermore, are they otherwise healthy if no medication was taken (including the hormonal composition)? Or does the term mean that the patients are healthy if no plasma homocysteine reducing agents are taken?

Claim 39 recites the limitation "for contraception" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Response to Arguments

Applicant's arguments filed February 9, 2006 averring the term being understood by one of ordinary skill in the art, by citing various literatures, have been considered, but are not found persuasive. The term in question is crucial to the interpretation of the claims and the rejection set forth in the previous office actions. It is clear that the instant specification does not provide any definitions of such expression and that such expression can be at least interpreted into more than one valid meanings. Therefore, the metes and bounds of the claims is therefore, can not be ascertained by one of ordinary skill in the art.

Examiner notes that the term "otherwise healthy patient" is interpreted as individual who is healthy without taking the hormonal composition.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Application/Control Number: 09/890,029

Art Unit: 1617

Claims 20, 28, 29, 31, 32, 33, 35, 37, and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Spellacy et al. (Contraception, 1972;6(4):263-273), reference of record.

Spellacy et al. teaches vitamin B6 supplement is administered to women taking progesterone containing oral contraceptive (See the abstract).

Claims 20, 27, 32, 33, 34, 35, and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Butterworth et al. (Am. J. Clin. Nutr., 1982;35(1):73-82 from IDS received 1/2/2002).

Butterworth et al. teaches folic acid was supplemented to women taking progesterone containing oral contraceptive (See the abstract).

Response to Arguments

Applicant's arguments filed February 9, 2006 averring Spellacy's failure to teach healthy patients have been considered, but are not found persuasive. The term "otherwise healthy patients" is interpreted as individual who is healthy without taking the hormonal composition. In Spellacy, patients taking steroidal contraceptions inducing the carbohydrate metabolism disorders; therefore, without taking steroidal compositions, the patient would be healthy. Accordingly, the patient population is considered the same as recited, which is "otherwise healthy" population.

Applicant's arguments filed February 9, 2006 averring Spellacy's failure to teach the administration of vitamin B6 in combination with a gestagen hormone to reduce the

Art Unit: 1617

risk of thromboembolism have been considered, but are not found persuasive. Applicants' attention is directed to Ex parte Novitski, 26 USPQ2d 1389 (BOPA 1993) illustrating anticipation resulting from inherent use, absent a haec verba recitation for such utility. In the instant application, as in Ex parte Novitski, supra, the claims are directed to preventing a malady or disease with old and well known compounds or compositions. It is now well settled law that administering compounds inherently possessing a protective utility anticipates claims directed to such protective use. Arguments that such protective use is not set forth haec verba are not probative. Prior use for the same utility clearly anticipates such utility, absent limitations distancing the proffered claims from the inherent anticipated use. Attempts to distance claims from anticipated utilities with specification limitations will not be successful. At page 1391, Ex parte Novitski, supra, the Board said "We are mindful that, during the patent examination, pending claims must be interpreted as broadly as their terms reasonably allow. In re Zletz, 893 F.2d 319, 13 USPQ2d 1320 (Fed. Cir. 1989). As often stated by the CCPA, "we will not read into claims in pending applications limitations from the specification." In re Winkhaus, 52 F.2d 637, 188 USPQ 219 (CCPA 1975).". In the instant application, Applicants' failure to distance the proffered claims from the anticipated prophylactic utility, renders such claims anticipated by the prior inherent use.

Applicant's arguments filed February 9, 2006 averring Butterworth failure to teach healthy patients have been considered, but are not found persuasive. The term "otherwise healthy patients" is interpreted as individual who is healthy without taking the hormonal composition. In Butterworth, patients taking steroidal contraceptions inducing

Art Unit: 1617

cervical dysplasia; therefore, without taking steroidal compositions, the patient would be healthy. Accordingly, the patient population is considered the same as recited, which is "otherwise healthy" population.

Applicant's arguments filed February 9, 2006 averring Butterworth's failure to teach the administration of folic acid in combination with a gestagen hormone to reduce the risk of thromboembolism have been considered, but are not found persuasive. See the inherency arguments presented above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 9-12, 20, and 25-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson et al. (US Patent 5,654,011) in view of Fermo et al. (Annals of Internal Medicine, 1995:123(10):747-753 – html version).

Jackson et al. teaches a multivitamin composition containing homocysteine level reduction amount of folic acid, vitamin B6, and vitamin B12 (See col. 3, line 60-63, col. 5, lines 15-30, col. 6, lines 18-21). Jackson's composition is taught as useful inn various stages of women life for reducing health risks of women (See the abstract).

Jackson et al. does not expressly teach the patients taking hormonal composition containing gestagen.

Fermo et al. teaches hyperhomocysteinemia as pathogenic significant of patients developing thrombosis (See the abstract and the Discussion Section).

It would have been obvious to one of ordinary skill in the art at the time of invention to employ folic acid, vitamin B6, and vitamin B12 to reduce the serum level of homocysteine and thereby the risk of coronary disease in patients taking gestagen composition.

One of ordinary skill in the art would have been motivated to employ folic acid, vitamin B6, and vitamin B12 to reduce the serum level of homocysteine and thereby the risk of coronary disease in patients taking gestagen composition. It is known that high homocysteine level is associated with coronary diseases including thrombosis.

Therefore, employing a homocysteine reducing amount of vitamin B6, B12, and folic acid, regardless of what the cause of hyperhomocysteinemia or patient population might be, to any patient suffering from hypercysteinemia including patient population herein recited, would be reasonably expected to be useful and effective in lowering the homocysteine level and further reducing the risk of thrombosis thereby.

Page 8

Art Unit: 1617

Response to Arguments

Applicant's arguments filed February 9, 2006 averring the cited prior art's failure to disclose the administration of gestagen hormone and its relationship between homocysteins levels and thromboembolism have been considered, but are not found persuasive. The herein claimed invention is directed towards the treatment of elevated homocysteine levels in order to reduce the risk of thromboembolism using old and wellknown agents for reducing homocysteine levels due to gestagen hormone. Examiner notes that the herein claimed agents are known to decrease the level of homocysteine. which is responsible for increasing the risk of cardiovascular disorders. Therefore, one of ordinary skill in the art would have been motivated to employ the herein recited agents to treat the elevated homocysteine levels and thereby reduce the risk of thromboembolism in the same patients, regardless of the cause of elevated homocysteine level. Considering the following example: morphine, an old and wellknown analgesic, is known to be effective to treat pain, regardless of what the causes might be, be it cancer related pain, pain due to broken bone, or pain due to kidney stone. These conditions can be effectively treated with morphine since the treatment is directed to pain itself not the etiologies of it. In the same way, the instant invention is to treat elevated homocysteine levels, not the etiologies (e.g., one of which is gestagen hormone according to the instant claim) of it. Therefore, when a patients is presented with elevated homocysteine levels, possessing the cited prior arts, one of ordinary skill in the art would have employed the herein claimed agents in a method of treting hyperhomocysteinemia and thereby reducing the risk of thromboemolism.

Application/Control Number: 09/890,029

Art Unit: 1617

Applicant's arguments filed February 9, 2006 averring the herein claimed agents, e.g., folic acid, vitamin B6, or vitamin B12, not being known to reduce the risk of thromboembolism when taken with gestagen hormone have been considered, but are not found persuasive. The reasons of the rejection is based on the fact that these agents are well known to be useful in decreasing homocysteine levels and thereby reducing the risk of thromboembolism.

Applicant's arguments with regard to Kafrissen is moot in view of the withdrawal of the rejection under 35 USC 102.

No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Application/Control Number: 09/890,029 Page 10

Art Unit: 1617

Any inquiry concerning this communication or earlier communications from the examiner should be directed to San-ming Hui whose telephone number is (571) 272-0626. The examiner can normally be reached on Mon 9:00 to 1:00, Tu - Fri from 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, PhD., can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

San-ming Hui/
Primary Examiner
Art Unit 1617